

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. (Currently Amended) A method for providing simulated audio communications, which simulate an RF transmission using a selected type of RF transceiver and a selected type of RF transmission medium, which are being transmitted via a simulated radio transmission, to a simulation system, comprising the steps of:

linking as a data network, a server and two or more client systems;

storing at least one transceiver model, accessible by the server, wherein the transceiver model stores data representing audible transceiver effects of the selected RF transceiver;

storing at least one impairment model, accessible by the server, wherein the impairment model stores data representing audible transmission effects of the selected RF transmission medium;

sampling-audio voice input at a first client system, resulting in sampled-audio voice data; transmitting the sampled-audio voice data to the server;

using the server to add additional audio data to process the sampled-audio input voice data, by applying at least one transceiver model and at least one impairment model, wherein the transceiver model injects-radio transceiver effects into the sampled-audio input voice data and the impairment model injects-radio transmission effects into the sampled-audio input voice data, thereby resulting in processed audio data;

wherein-at least one of the-radio transmission effects is noise due to the transmission medium;

wherein at least one of the transceiver effects operates to limit amplitude of the audio data due to transceiver sensitivity;

transmitting the processed audio data to a second client system; and
~~converting the processed audio data to an analog audio signal at the second client system.~~

2. (Original) The method of Claim 1, wherein the simulation system provides tactile simulation, and further comprising the steps of using tactile simulation to select a transceiver, and of transmitting data representing the selected transceiver to the server such that the selected transceiver corresponds to the transceiver model.

3. (Original) The method of Claim 1, wherin the simulation system provides a visual simulation, and further comprising the step of providing a visual display corresponding to control of one or more audio qualities of the audio communications.

4. (Original) The method of Claim 1, wherein the simulation system provides a visual simulation, and further comprising the step of providing a visual display depicting one or more audio qualities of the audio communications.

5. (Original) The method of Claim 1, wherein the transceiver model represents at least a type of receiver, transmitter, or transceiver.

6. (Original) The method of Claim 1, wherein the transceiver model represents at least the transceiver power.

7. (Original) The method of Claim 1, wherein the impairment model represents one or more attributes from the following group: channel fading, multi-path fading, propagation delay, noise (including Gaussian), Doppler shift effects, and gain control.

8. (Original) The method of Claim 1, wherein the transceiver model represents a wireless receiver and the impairment model represents one or more attributes from the following group: filtering, noise injection, line-of-sight effects, propagation losses, and signal fading.

9. (Original) The method of Claim 1, wherein either the first client system or the second client system or both are transceiver systems.

10. (**Currently Amended**) The method of Claim 1, wherein the impairment model uses dynamic simulated entity data, such that the audio data is modified according to simulated relative movement of at least one of the client systems.

11. (Previously Presented) The method of Claim 10, wherein the dynamic simulated entity data is velocity data of the first client system or the second client system or both.

12. (Previously Presented) The method of Claim 10, wherein the dynamic simulated entity data is the distance between the first client system and the second client system.

13. (Original) The method of Claim 1, wherein the impairment model is a multipath model, based on velocity of the second client system and radio frequency.

14. (Original) The method of Claim 1, wherein the impairment model is a Doppler effects model, based on velocity of the second client system and the angle between the first client system and the second client system.

15. (Original) The method of Claim 1, wherein the impairment model is a channel noise model, based on Gaussian noise generator output data whose level is controlled by path gain.

16. (Currently Amended) A system for providing simulated audio communications, which simulate an RF transmission using a selected type of RF transceiver and a selected type of RF transmission medium, which are being transmitted via a simulated radio transmission, to a simulation system; comprising the steps of:

a data network having a server and two or more client systems;

wherein a first client system is operable to sample audio voice input, resulting in sampled audio voice data, and to transmit the sampled audio voice data to the server;

a database for storing at least one transceiver model, accessible by the server, wherein the transceiver model stores data representing audible transceiver effects of the selected RF transceiver; and for storing at least one impairment model, accessible by the server, wherein the impairment model stores data representing audible transmission effects of the selected RF transmission medium;

wherein the server is operable to process add additional audio data to the sampled audio voice data input, by applying at least one transceiver model and at least one impairment model, wherein the transceiver model injects radio transceiver effects into the sampled audio voice data input and the impairment model injects radio transmission effects into the sampled audio input voice data, thereby resulting in processed audio data; and to transmit the processed audio data to a second client system;

wherein at least one of the radio transmission effects is noise due to the transmission medium;

wherein at least one of the transceiver effects operates to limit amplitude of the audio data due to transceiver sensitivity;

wherein the second client system is operable to receive the processed audio data, and to convert the processed audio data to an analog audio signal.

17. (Original) The system of Claim 16, wherein the server further provides tactile simulation data to the second client system, such that an operator of the second client system may select a transceiver, and wherein the second client system transmits data representing the selected transceiver to the server such that the selected transceiver corresponds to the transceiver model.

18. (Original) The system of Claim 16, wherein the server further provides visual simulation data to the second client system, such that the second client system provides a visual display corresponding to control of one or more audio qualities of the audio communications.

19. (Original) The system of Claim 16, wherein the simulation system provides a visual simulation, and further comprising the step of providing a visual display depicting one or more audio qualities of the audio communications.

20. (Original) The system of Claim 16, wherein the transceiver model represents at least a type of receiver, transmitter, or transceiver.

21. (Original) The system of Claim 16, wherein the transceiver model represents at least the transceiver power.

22. (Original) The system of Claim 16, wherein the impairment model represents one or more attributes from the following group: channel fading, multi-path fading, propagation delay, noise (including Gaussian), Doppler shift effects, and gain control.

23. (Original) The system of Claim 16, wherein the transceiver model represents a wireless receiver and the impairment model represents one or more attributes from the following group: filtering, noise injection, line-of-sight effects, propagation losses, and signal fading.

24. (Original) The system of Claim 16, wherein either the first client system or the second client system or both are transceiver systems.

25. (Original) The system of Claim 16, wherein the impairment model uses dynamic simulated entity data.

26. (Previously Presented) The system of Claim 25, wherein the dynamic simulated entity data is velocity data of the first client system or the second client system or both.

27. (Previously Presented) The system of Claim 25, wherein the dynamic simulated entity data is the distance between the first client system and the second client system.

28. (Original) The system of Claim 16, wherein the impairment model is a multipath model, based on velocity of the second client system and radio frequency.

29. (Original) The system of Claim 16, wherein the impairment model is a Doppler effects model, based on velocity of the second client system and the angle between the first client system and the second client system.

30. (Original) The system of Claim 16, wherein the impairment model is a channel noise model, based on Gaussian noise generator output data whose level is controlled by path gain.